

summer eggs are agamic, while the winter eggs require to be fertilized. This is also in accordance with the case of *Daphnia*. In this genus, as in *Rotatoria*, the "summer eggs" are agamic; but it has not yet been conclusively proved that the "winter eggs" of either require impregnation. However this may be, the development of the eggs of insects sufficiently proves that eggs composed of several ovarian cells, like those which are unicellular, are generally incapable of development without impregnation. But no one can deny the name of true eggs to the ova of Butterflies, &c.; and we therefore cannot class as "false eggs" those which arise from more than one cell. Perhaps it would be better to distinguish the two classes as "compound," and "simple" or unicellular. The names we may adopt are, however, of less importance than the establishment of the fact that throughout the *Annulosa* there are two sorts of eggs, which are of an essentially different structure, and therefore cannot, strictly speaking, be regarded as homologous with one another.

ZOOLOGICAL SOCIETY.

January 8, 1861.—Dr. J. E. Gray, V.P., in the Chair.

ACCOUNT OF THE REPTILES SENT BY DR. WUCHERER FROM BAHIA. BY DR. A. GÜNTHER.

Of the living specimens of Reptiles sent by Dr. Otto Wucherer from Bahia, only a few have survived the transport. Most of them perished during the voyage; and several arrived in so exhausted a condition that they died very shortly afterwards. It became evident, from the emaciated state of the latter, that those animals had been killed, not by the change of the temperature, but by want of food and water. Those tropical animals naturally require a greater supply of the latter than our European species do; and perhaps it would be better to place them during the transport in a cool place on board the steamer, in order to subdue the natural functions and to lessen the desire for food. Once every week, on a bright day, they ought to be brought on deck and exposed to the sun; then some water might be poured into the cage or box in which they are kept. I have no doubt that the failures hitherto experienced in bringing over the beautiful *Hylæ* of the Tropics, and other reptiles living in damp places, might be avoided by the adoption of the measures recommended.

As it is, however, only three of Dr. Wucherer's specimens survive—a beautiful specimen of the South American Rat-Snake, *Spilotes variabilis*, about 6 feet long, one *Polychrus marmoratus*, and one *Philodryas viridissimus*. The two former are exhibited for the first time, and apparently are doing very well. The Rat-Snake feeds regularly on birds and small mammals; Dr. Wucherer has observed that this species has the power of setting its tail in a trembling motion, like the Rattle-Snake, if made angry. I have once seen the same in the specimen living in the Gardens, and several times in the North

American *Coluber quadrivittatus*, whenever it was attacked by a dog: in the latter case, it was not fear which produced the trembling motion of the tail; for it was immediately followed by the snake striking at the dog*.

The specimens of *Polychrus marmoratus* show the remarkable peculiarity, that their femoral pores are not visible; this has been observed also by Bibron, who says that they are often very indistinct in this species. It changes its colours, like the Chamæleon, the name of which has been conferred on it by the inhabitants of Bahia. Its ground-colour is brown when it is cold or asleep, bright green when it feels comfortable, and yellowish-green when exposed to great heat. Also the great capacity of the lungs and the lively motion of the eyes (which, however, act in concert with each other) remind one of its representative of the Old World. Since it has been removed to a warmer place than the cages in the Reptile-house are, it has recovered its full strength, feeds regularly on meal-worms, and is very fond of milk. Being a Tree-Lizard, its favourite place is on the branches of a large geranium, near the fire-place; but even that place is sometimes too cold for it; and then it will approach nearer to the fire than it is possible to keep the hand for any length of time. Nevertheless it lies there basking for hours, extending the neck towards the fire, and stretching the hind limbs in a line with the tail. These animals will drink much; and the quantity of water swallowed on a single day by this specimen, the body of which does not exceed 5 inches in length, cannot be less than half an ounce.

The researches of Dr. Wucherer, continued for a considerable space of time and confined chiefly to Snakes, prove that the environs of Bahia are by no means so poor in species of this tribe as has been represented by Castelnau. On the contrary, the following list, containing chiefly the species common in the immediate vicinity of Bahia, will be considerably increased, if Dr. Wucherer carries out his intention of extending his researches beyond those limits; and it is to be hoped that, with the assistance of this gentleman and of his friends†, we shall produce one of those local faunas which are so valuable as contributing to our knowledge of geographical distribution, and to the distinction of the local variation of species.

The following list of Snakes has been made up from the notes of Dr. Wucherer, and from actual specimens sent in spirits to the British Museum:—

1. *Geophis*, n. sp.‡ From Canavieras, a small town south of Bahia.
2. *Elapomorphus Wuchereri*, Gthr. From Ilhéos.
3. *Liophis cobella*, L.

* The young of *Cenchrus piscivorus*, born alive in the Gardens about the middle of February, show this peculiar motion more frequently than any other of the species mentioned.—March 5.

† Dr. Wucherer has been assisted in collecting by Consul C. A. Gültzow, Dr. Heller, Dr. Tölsner, Herr v. Steiger, H. Föppel, and other gentlemen. Mr. Bennett has kindly taken charge of the reptiles during the transport.

‡ Dr. Wucherer has reserved to himself the description of this species.

4. *Liophis Merremii*, Wied. Very frequent.
5. — *reginæ*, L. Very frequent.
6. — *conirostris*, Gthr.
7. *Xenodon severus*, L.
8. — *rhabdocephalus*, Wied. Very frequent.
9. — *colubrinus*, Gthr. The validity of this species has been fully acknowledged by Dr. Wucherer. He has sent two specimens in spirits, one of which measures 3 feet 8 inches in length ; another, sent off alive, perished on the voyage. Dr. Wucherer has observed that the scales of all the species of *Xenodon* have a small colourless spot near the tip ; it is especially distinct in *X. colubrinus*. The West Indian species of *Dromicus* have this spot yet more distinct. All the species of this genus are very savage and apt to bite ; they frequent dry places ; their food, however, consists in frogs.
10. *Spilotes corais*, Cuv. Frequent ; called *Pupapinta*. Scales in fifteen or seventeen series.
11. *Spilotes variabilis*, Wied. Frequent ; called *Cainana*. Dr. Wucherer found the loreal always absent in old specimens.
12. *Spilotes pæcilostris*, Wied.
13. *Coryphodon pantherinus*, Merr. The form of the head and the colours of this species vary much according to age.
14. *Herpetodryas fuscus*, L. Frequent.
15. — *carinatus*, L. Less frequent.
16. *Philodryas viridissimus*, L. Very frequent.
17. ? — *serra*, Schleg. A single specimen from Ilhéos.
18. *Dryiophis acuminata*, Wied. Very frequent ; called *Cipó*.
19. — *argentea*, Daud. Less frequent.
20. *Thamnodynastes Nattereri*, Mikan. Frequent.
21. — *punctatissimus*, Wagl. One specimen from Canavieras.
22. *Leptodeira annulata*, L. Very frequent.
23. *Eudipsas leucocephalus*, Mikan. Frequent.
24. *Leptognathus Catesbyi*, Weig. Two specimens from Canavieras.
25. *Scytale coronatum*, Schneid.
26. *Oxyrhopus Clælia*, Daud.
27. — *petolarius*, L.
28. — *trigeminus*, D. & B. Frequent.
29. *Uranops angulatus*, L. Frequent near rivers.
30. *Elaps lemniscatus*, L. Very frequent.
31. — *corallinus*, L.
32. *Epicrates cenchria*, L. Rare ; called *Giboia*.
33. *Xiphosoma caninum*, L.
34. *Boa constrictor*, L. Frequent ; called *Giboia*.
35. *Eunectes murinus*, L. Very frequent ; called *Sucurujuba*.
36. *Craspedocephalus atrox*, L. Called *Caisaeca* ; frequent, especially near Nazareth on the river Jaquaripa.
37. *Craspedocephalus bilineatus*, Wied. This is a venomous Tree-Snake ; it is called *Surucúcú patyoba*, from the palm on which it is usually found ; it renders the cutting of the leaves of this palm

very dangerous. Another similar snake lives on the Uricana pam, from which its name of *Surucúcú uricana* is derived.

38. *Lachesis mutus*, L. Called *Surucúcú*; it lives in holes together with *Cœlogenys paca*, and is very dangerous to the dogs used in shooting the latter.

39. *Crotalus horridus*, L.

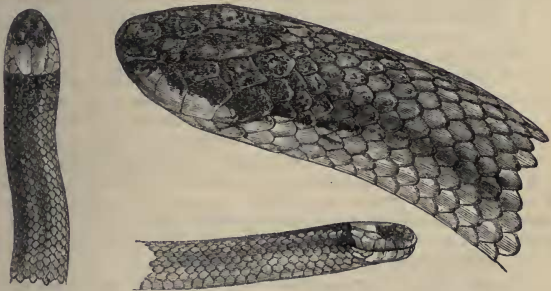
I add the description of the new species of Snakes, and of a new Lizard, sent by Dr. Wucherer to the British Museum.

ELAPOMORPHUS WUCHERERI.

Six upper labial shields, the second and third of which enter the orbit; two posterior oculars. Scales in fifteen rows; ventral shields 181–208. Reddish-olive (in spirits); head black, with a yellow band across the occipitals; sometimes with three dark longitudinal lines. Very old specimens uniformly coloured, the head being dirty light brown.

Hab. Bahia.

Description.—This species has a very slender body, whilst the tail is comparatively short. The head is depressed and obtuse, like that of an *Elaps*. Rostral shield of moderate extent, not reaching to the upper surface of the head. Anterior frontals one-third only of the size of the posterior ones; vertical subhexagonal, somewhat longer than broad; occipitals large. Nasal shield oblong, occupying the place of a loreal; one anterior, two posterior oculars. Two temporal shields, one behind the other, the anterior in contact with the



oculars. Six upper labial shields, the second produced upwards and backwards so as to enter the orbit, the third immediately below the eye. Lower labials seven or eight, the fourth and fifth being very large. Two pairs of chin-shields; two or three pairs of scale-like shields between the chin-shields and the ventral plates. Scales smooth, polished, rhombic, in fifteen rows. Ventral shields 206–208; anal bifid; subcaudals 33–47. Dr. Wucherer has found in a very large specimen 181 ventral and 32 subcaudal shields.

Specimens of 19 inches in length are reddish-olive in spirits, with a darker line along the vertebral series of scales. In a specimen in which this line is very distinct, another similar line is to be seen along each side of the body, between the fourth and fifth outer series of scales. Smaller specimens have those lines still more distinct. The head and the anterior portion of the nape are brownish-black, with a broad yellow band across the occipitals and temporals to the side of the mouth. The lower parts are yellowish. Very large specimens are of a uniform bright gamboge-yellow, the head being dirty light brown, gradually becoming lighter posteriorly; there are some greyish-ash irregular spots on the side of the head and under the chin, and some minute irregular grey spots on the sides of the belly and on the outermost rows of scales.

The posterior maxillary tooth is grooved.

Two specimens were taken at Ilhéos; one is 18 and one 19 inches long. Another large specimen, of which a sketch has kindly been communicated to me by Dr. Wucherer, is from the same place; it was captured on an open piece of ground before the house of a Cacao-planter, situated some 60 feet above the level of the river and perfectly dry; its total length is 4 feet 5 inches, and the length of the tail $4\frac{1}{2}$ inches. Its habit is stouter than that of the younger specimen, and it appears to me to be a female.

TRACHYCYCLUS SUPERCILIARIS. (IGUANIDÆ.)

?? *Proctotretus Talsneri*, Berthold, Gött. Nachr. 1859, p. 179.

Occipital plate of moderate size, as large as the eye. Above uniform brownish-olive (in spirits), yellowish below, a brown band along the lower side of the thigh and before the vent.

Hab. Bahia.

Description.—The head is slightly depressed, of moderate width, the snout is as broad as long. The whole of the upper surface is covered with small, irregular shields, that in the middle of the occiput being the largest, about as large as the eye. The superciliary margin is sharply prominent, continued into the canthus rostralis, and formed by imbricate pointed scales, the point of which is directed backwards. The eyelids are entirely covered with small granular scales. The nostril is situated near the extremity of the snout, before the canthus rostralis, and separated from it by a shallow groove; it is in a single convex shield. The upper and lower labial shields are narrow, and there are two or three other series of small shields, running above, and parallel to, the upper labials, and covering the loreal region. The lower of those series extends to below the eye. The neck and the temporal region are covered with small keeled scales. The opening of the ear is large, subtriangular, and its anterior margin is provided with six or seven tooth-like plates. The scales on the lower side of the head are small, smooth, and become smaller on the throat, where they form a very indistinct collar. There are two oblique deep folds on the side of the neck, between the tympanum and the shoulder.

The back is covered with keeled scales of moderate size, the keels terminating in small spines, and forming lines which converge from both sides towards the vertebral line. There are seventeen longitudinal lines of keels across the back between the shoulder-joints and fifteen between the hip-joints. The scales on the upper parts of the limbs are more sharply keeled and more spiny than those on the back. The tail is of moderate length, depressed on its base, and slightly compressed on its middle; it is surrounded by rings of scales, which are much larger than those of the body, each terminating in a prominent spine.

The scales on the belly are rather small and smooth, disposed in transverse series; there are about twenty longitudinal series across the breast between the front limbs; the scales on the lower parts of the limbs are smooth, except those on the soles of the feet and toes, which again are strongly keeled. There are no femoral or anal pores. Palatine teeth none.

All the upper parts are brownish-olive; the lower dull yellowish, with indistinct greyish reticulated lines; the region before the vent is deep brown, and a band of the same colour runs along the lower side of the thigh.

	in.	lin.
Length of the snout (to the anterior angle of the orbit)	0	4
Length of the head (to the anterior margin of the tympanum)	0	10
Greatest width of the head	0	8 $\frac{1}{2}$
Distance of the anterior angles of the orbits	0	4 $\frac{1}{2}$
Length of the trunk (from tympanum to vent)..	2	6
——— of the tail	5	0
——— of the fore limb	1	9
——— of the hind limb	2	6
——— of the fourth finger (from the base of the fifth).....	0	7
——— of the fourth toe (from the base of the fifth).....	1	0
Total length.....	8	4

DESCRIPTION OF A NEW SPECIES OF WATER-HEN (*GALLINULA*) FROM THE ISLAND OF MAURITIUS. BY ALFRED NEWTON, M.A., F.L.S., F.Z.S.

A small collection of birds recently sent from Mauritius by my brother, Mr. Edward Newton, Assistant Colonial Secretary in that island, and a Corresponding Member of this Society, contains a single specimen of a Water-hen which I am led to consider as distinct from the common *Gallinula chloropus*, with which it has hitherto been confounded. To this conclusion I am chiefly induced by the weight I attach to my brother's opinion, which is decidedly in favour of regarding it as different from our own familiar bird; for, though it must be confessed that the differences observable in the dried skin are but slight, they are perhaps not more so than are to be found in